STAN-EVAL NOTES
CIVIL AIR PATROL VIRGINIA WING
UNITED STATES AIR FORCE AUXILIARY
7401 Airfield Drive
Richmond, Virginia 23237-2250
September 2012

Danville Flight Clinic: We are planning a funded flight clinic at KDAN on Saturday, 20 October. We will have several check pilots and instructor pilots to help you get your check ride done. This clinic is open to any VAWG pilot needing a check ride. Pilots needing any of the following may sign up.

- Form 5 (annual or abbreviated)
- Form 91
- Tail Strike Avoidance training

We will also be available to provide instructional flights if you think you need some help with proficiency. Send your name, email, phone, CAPID, and type of flight requested to steve.hertz@ngc.com.

G1000 Ground School: We are hosting a G1000 ground school at the Rick Aviation flight school classroom at Newport News International Airport (PHF) 8 September beginning at 1000. Contact Niko Kubli at kubmiester@aol.com if you are interested.

Newport News Flight Clinic: We had a very successful flight clinic at KPHF 21 August completing 8 check rides:

- 2 F91 MP Check rides completed
- 2 Tail Strike Avoidance training rides completed
- 3 F5 check rides completed including two new F5 pilots
- 1 IP check ride resulting in a new IP for Group 2

Many thanks to Charlie DeFoore who organized the event and the IPs and Check Pilots who took a day of their time to get this done.

Military Flight Physicals Not Legit for CAP: We often get a question from current military pilots on whether they can use their military flight physicals in lieu of a FAA medical. Unfortunately, CAP cannot accept the military flight physicals as it is part of our exemptions from the FAA that all of our pilots must carry at least a Third Class Medical Certificate issued by an FAA Medical Examiner.

Part of the confusion stems from an exception granted by the FAA (see CFAR Part 61.23 b (9)) to allow military pilots who are transitioning from active duty, or on active duty that wish to fly small aircraft for pleasure (such as military flying club aircraft) to be able to do so without incurring any additional expense for the 3rd class certificate. Once they leave the military and/or desire to fly using a commercial or ATP certificate, they have to obtain the requisite FAA medical certificate. In our case, it doesn't matter. You must have at least a Third Class Medical Certificate issued by an FAA Medical Examiner to fly as PIC in CAP.

Stabilized approaches for GA: One of the techniques we are teaching to avoid tail strikes is to ensure a stabilized approach prior to landing. A good landing always starts with a good approach. But what is a stabilized approach for the GA aircraft we fly? A stabilized approach means that on final:

1. Aircraft is on airspeed
2. Aircraft is on glide slope
3. Aircraft is on centerline

These three factors constitute a stabilized approach for the type of aircraft we fly. Let's take a closer look at each of these.

“On airspeed” means that we are flying at the airspeed recommended by the manufacturer prior to landing. This airspeed is published in the POH and is also found on our CAP checklists in the landing portion. So for example, the C182T POH gives the airspeed as 60-70 KIAS on short final. For short field landings, the speed is pegged at 62 KIAS.

“On glide slope” means that the descent rate is stable and appropriate. Excessive descent rates will result in a hard landing. There is no specific descent rate specified in the POH but a good rule of thumb is that anything over 750 fpm should be avoided. If we assume a 3 degree glide slope we can expect about 350 fpm descent in a no wind condition at 70 KIAS. For a 4.5 degree glide slope more typical of our VFR approaches, a 550 fpm descent can be expected. For a six degree glide slope (which is about the steepest one should come in at) we can expect about 750 fpm descent. Using the spot method prior to landing helps us to stabilize the descent and land on a predetermined point along the runway. Note that landing with a tail wind increases your rate of descent if you maintain a constant descent angle. Just another reason why landing with a tail wind should be approached with caution.

“Aircraft on centerline” means that the aircraft is flying a straight line along the extended centerline of the runway. This means that drift due to cross winds have been stopped by either a crab or a wing low. If you are on short final and are drifting, you are not stabilized.

Ensuring a stabilized approach prior to landing isn’t just for avoiding tail strikes. It’s good airmanship.

VFR on Top: A useful variant to an IFR clearance is to request “VFR on Top” when you expect to be flying in VFR conditions. This allows the pilot to fly on an IFR flight plan while flying in VFR conditions and enjoy the advantages of VFR flight. When cleared for VFR on Top, the pilot operates according to VFR flight rules and those IFR rules that are applicable. So for example, if you take off in IFR conditions, you would follow the usual IFR rules until you are in VFR conditions. You would then advise ATC that you are VFR on Top. At that point you will need to fly at a VFR altitude (e.g. even or odd thousands plus 500 feet) and to observe VFR visibility and cloud clearance restrictions. You do not need to follow airways and you can change altitudes (but advise ATC). But you are still on an IFR flight plan so you cannot descend below IFR MEA’s. You will also continue to receive traffic advisories (a really handy thing) although “see and avoid” still applies. If at any time you are unable to remain VFR, just inform ATC. Since you are still on an IFR clearance, there is no need to re-file.

The terms VFR on Top does not restrict you to only requesting this when you are above any cloud deck. VFR on top also applies between layers – that is, anytime you can reasonably expect to remain VFR.

You can request VFR on Top while en-route or have it in your remarks section of your IFR flight plan.

New IAD Arrival or “How come that airliner is in my practice area?” (SM M. Kemp): For the past two years, the redesign of the DC Metroplex airspace has been in the works. It is called OAPM - Optimization of Airspace and Procedures in the Metroplex.

So what does that mean to us here in the Dulles area? It means new arrivals and departure routings into IAD. The SHNON arrival into IAD is gone, being replaced by the GIBBZ. But I’m a VFR pilot; what does that mean to me? This means that the airliners approaching IAD from the west may be in different locations than what you are used to seeing. The new procedures are designed to keep the airliners a little higher on arrival but this may not always be the case and the new routings are closer to our practice areas.

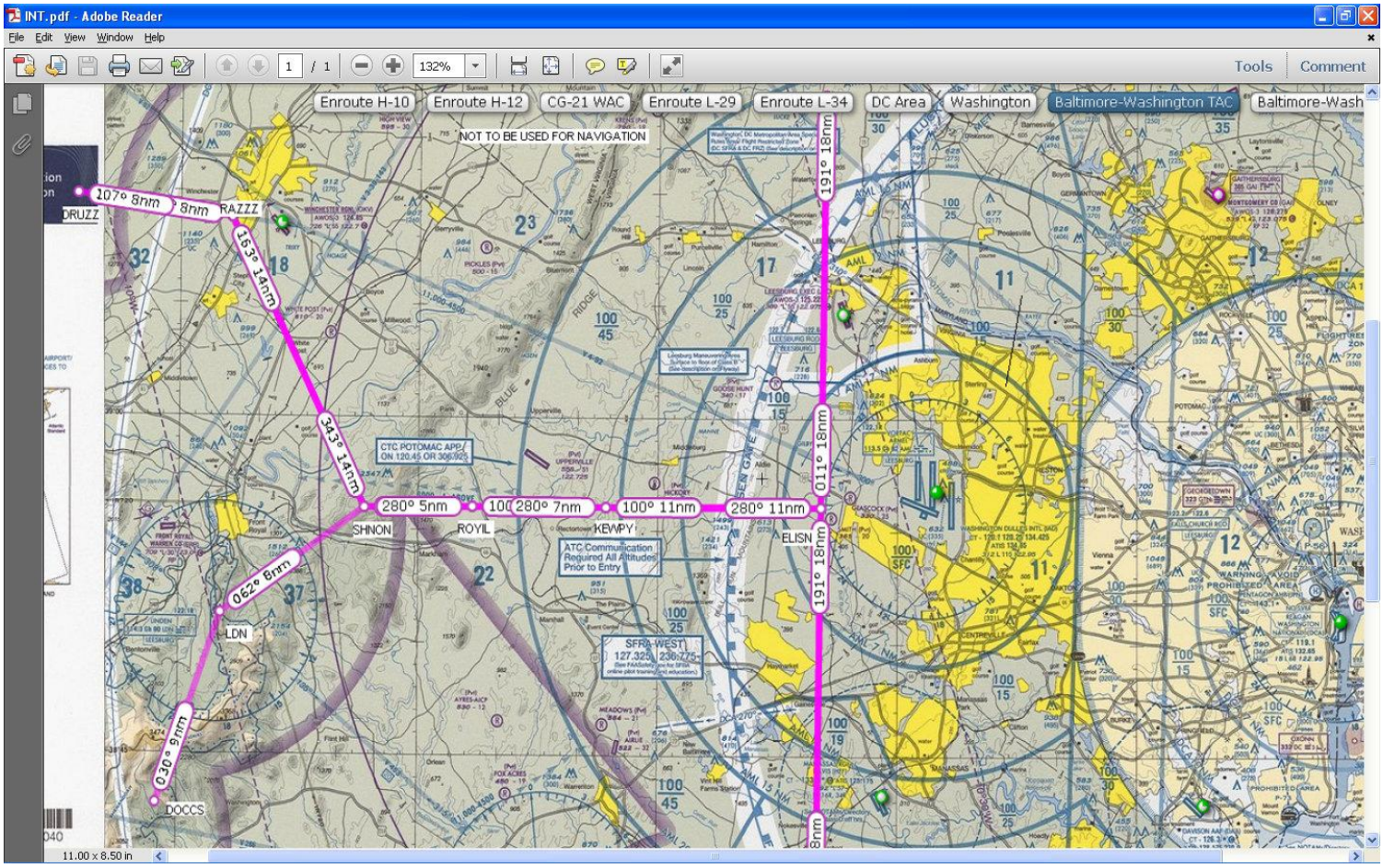
On the old SHNON arrival we (airliners) would approach either from the northwest over DRUZZ and RAZZZ (1nm west of OKV) or from the southwest over DOCCS and LDN (4 SE of FRR) in the descent to 6,000’and meet at the SHNON intersection which was on the AML 278 deg/28nm and proceed eastbound just south of Upperville.

The new GIBBZ arrival from the NW(over OKV) or SW(over LDN) meets at the GIBBZ intersection which is 1/2nm west of Middleburg. This leads to a routing that is further north and south than the old SHNON arrival. It actually takes the Dulles arrivals closer to the common practice areas at JYO.

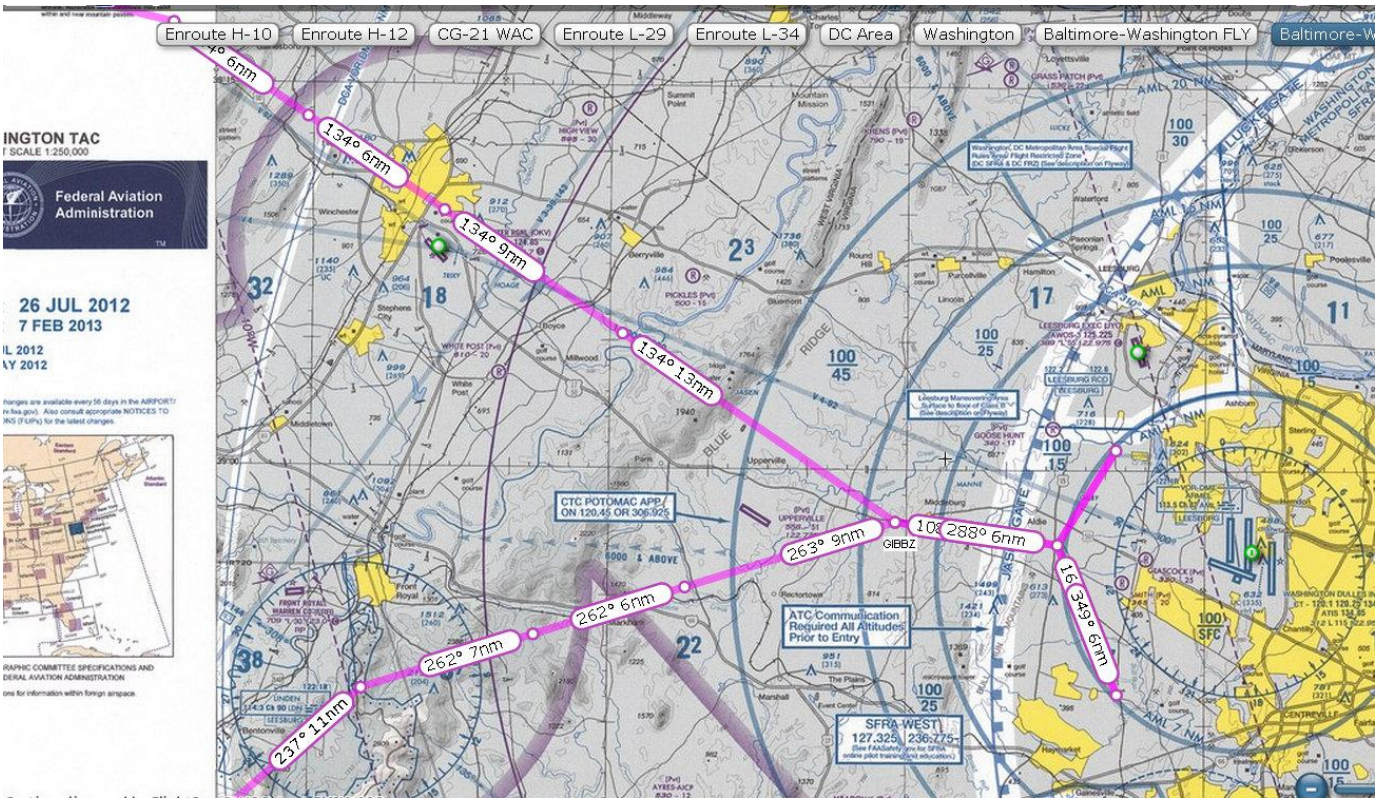
But I don't have to worry they are at 6,000' right? The answer is maybe. If traffic is light going into IAD and we have the airport in sight we can be cleared for the "Visual" approach. If the weather is CAVU it is not uncommon to be cleared for the visual approach from 20 to 30nm from the airport. Although we typically aim for a 3:1 descent path (3 miles distance for 1,000' altitude) for efficiency reasons, it is not always the case. The visual approach means that altitude and routing is at our discretion and we could be significantly below 6,000'. We just shouldn't descend below the class B airspace when in it. This is not depicted in our Boeing glass cockpit.

So bottom line, look for more airline traffic around our practice areas and you may occasionally get some that are at the bottom end of the class B airspace. Even if you are outside the 20nm ring of the class B airspace, it is never a bad idea to contact Potomac approach west on 120.45 for traffic advisories, especially if above 4,500' west of IAD. I have enclosed the new vs. the old routings superimposed on a TAC chart for your comparison. There are also a few new departures out of IAD and a new "engine failure on departure procedure" off of Runway 30, but that will have to be another time as they are less of a factor to us than this new arrival.

Here's the old SHNON arrival:



And the new GIBBZ arrival:



Trend Analysis: We collect stats on check rides every six months which goes into a NHQ repository. Here are the stats for VAWG for the six month period beginning 1 January 2012 thru 30 June 2012.

- Total Check Rides: 41 of which 38 were F5 and 3 were F91. In the previous period we did 66 check rides.
- Total successful: 39
- Total failures: 2 (one was a partial failure for O ride privileges and one failure due to engine mgt). We had one failure in the previous period.

The Final Walkaround: A good practice for VAWG pilots is to do a final walk around after the preflight is complete and just before getting into the aircraft. This highly recommended practice has caught many overlooked items such as chocks still chocked, tie downs still tied down, gas caps missing or loose, tow bars still in place, baggage doors open, and other items. Although pre flight checks should have taken care of all of this, there is always the time after the preflight is complete and before you get in the airplane for one or more items to be reset. After all, the wind is pretty gusty so you may not want to un-chock the aircraft while you are pre-flighting. Or one of your enthusiastic crew wants to help and checks the gas after you have done so but forgets to properly replace the gas cap. Or a late arriving crew member needs to put a bag in the baggage compartment but doesn't close it properly. Do the walk around after all the crew is in the a/c and just before you board. It may save you some embarrassment or could even save your life.

Tail Strike Avoidance Training: Don't forget that the deadline for completing your tail strike avoidance training is 31 October 2012. If you are a glass pilot and want to retain those privileges, you need to complete this training.

Armchair Flying: Many pilots who fly aerobatic routines (including for example the Blue Angels) prepare for the flight right from the comfort of the armchair. Close your eyes imagine you are in an F18, and now fly the maneuvers! This actually is a very powerful technique you can use yourself or when you are on the ground with a student. Want to teach spin recovery? Do it on the ground first. Have the student close their eyes and go through the motions as if they are in the airplane. The imagination is a wonderful thing and by going through the sequence (power back, ailerons neutral, rudder opposite the spin, elevator forward) it creates a vivid pattern in the mind better preparing them for the real thing. Are you going up to practice some commercial maneuvers? Do it on the ground first. Close your eyes and go through the chandelle (clear the area, power set, bank left 30 degrees, pull up …..). Try it and you will be surprised how much it can help.

Departure Procedures and Obstacle Departure Procedures: There are two types of departure procedures used in departing airports that are critical to understand. Departure Procedures (DP) are generally of interest for IFR flights while Obstacle Departure Procedures are of interest to both VFR and IFR flights. Both are designed to save your life so we need to understand and follow them.

An obstacle departure procedure (ODP) is a procedure for departing an airport to ensure terrain and obstacle clearance (e.g. you won't hit anything if you follow the ODP). Many pilots are surprised to learn that there are ODPs at most airports we fly out of (OKV, JYO, EZF, LYH, MKV, and so forth). Now here's the bigger surprise: if you are departing an airport with an ODP on an IFR clearance you MUST follow the ODP unless you are departing in VFR conditions. ATC does not explicitly include an ODP in your clearance but it must be followed and ATC expects you to follow it. If you don't, assuming you don't hit anything, expect to get yelled at.

Failure to follow ODPs can be fatal. There was a recent accident at FRR (Front Royal) where an SR22 departed in IFR conditions from runway 28 and promptly hit a ridge just west of the airport. If the pilot had read and followed the ODP (which ATC had expected he would), he would have realized that departing runway 28 was NA. The clearance he had received from ATC did not contain the ODP (nor should it have) but it is always assumed that ODPs will be followed. The reader should take the time to review the ODP at LUA (Luray) to see how complex they can be. The reader should also review the ODPs for any airports he or she expects to fly out of. ODPs are found in the Terminal Procedures Publication (TERPs) Section L (which also has the takeoff minimums).

ODPs are not just for IFR flights. They are a lifesaver for VFR flight at night or in marginal conditions. Follow the ODP and you won't hit anything on departure.

A departure procedure (or DP) is a published procedure for departing an airport that is included in your IFR flight plan. They are found in your US Terminal Procedure Publication (TERPs) and follow the IFR plates for a particular airport. For example, if you fly out of PHF (Newport News) on an IFR flight plan, you can expect the HENRY TWO departure which can be found right after the approaches for PHF in the TERPs. Likewise, flying out of HEF (Manassas), you can expect to fly the ARSENAL TWO departure which is found with the HEF approaches in the TERPs. There can be more than one DP for an airport. For example, RIC (Richmond) has two: COLIN FIVE and YEAST ONE. These procedures can be complicated and have many transitions so it's important to brief these before takeoff. The ARSENAL TWO has seven different "versions" called transitions. So it's not enough to know the DP, you must also know the transition.

DPs are always assigned as part of your clearance: "CAP4529, you are cleared to the London Heathrow airport via the ARSENAL TWO Departure FLUKY transition…." Once cleared for takeoff, you must fly the DP as published including the published altitudes unless advised otherwise. So if you take off and the DP has various altitudes to fly for various legs, ATC will expect you to climb to each of those altitudes without you being specifically told to do so. If you don't, expect to crash or at least get yelled at.

DPs serve three purposes. First, they ensure obstacle and terrain clearance. If followed properly, you won't hit anything (or you can ask the FAA for your money back). Secondly, they are designed to provide an orderly flow

of traffic. And finally, they cut down on the required communications with ATC. Once on a DP, ATC doesn't need to talk to you till you reach the limits of the DP.

The following table compares DPs with ODPs.

	Departure Procedure	Obstacle Departure Procedure
Applicability	• IFR Flight Plan	• IFR and VFR in marginal and night conditions
Purpose	• Terrain & obstacle clearance • Orderly flow and transition • Reduces required ATC communications	• Terrain & obstacle clearance
Assigned by ATC	• Explicitly included in clearance	• Not assigned by ATC for IFR but ATC expects it to be followed in all but VFR conditions • VFR flight should follow ODPs in marginal and night conditions
Description	• Found in the TERPs with the approach plates for the airport	• Section L of the TERPs

TFR Season has begun (LtCol G. Jackson): As many of you have noted in your daily emails from both AOPA (if you're a member) and various other venues, there are frequent TFR's occurring in and around Virginia.

Given we are moving into the final weeks of our upcoming presidential election, you can expect that we'll see increasing TFR's in and around Virginia, many on very short notice as our candidates move in and thru our areas as part of their campaigning.

It is critical that you check NOTAM's and TFR's prior to EVERY flight. Even if you are just going to do pattern work, the last thing you need is to see the sights of a .50 cal aimed at you! Having flown many, many intercept training flights I can assure you, they can and will get you and they mean business if you are intercepted because you violated a TFR.

Given the tempo with which we are seeing TFR's pop up these days, it isn't possible to send each and every message across INFO and there remains too great a chance one may not go out the INFO server for any number of reasons. Check the NOTAMS – check for TFR's prior to any flight you make whether it be in a CAP plane or your own. Even once in the air, TFR's can pop up that were not there when you did your flight planning. On long flights, call Flight Service and ask if there are any new TFRs that you should be aware of. Or always file and fly IFR and ATC will let you know.

To our FRO's I ask this of you, please consider adding this question to the pilot as part of your release queries: "Did you check for NOTAMS or TFR's?"

CAP Call Sign (LtCol M. Moyer): The FAA in July published a memorandum showing that the call sign "CAP FLIGHT" was reinstated. The current "CAP" was not deleted and IS still currently the authorized call sign for CAP aircraft. There has been confusion over this nationwide since the National Board Meeting in Baltimore this past weekend. Malcolm Kyser, Chief of DOK announced that the use of "CAP FLIGHT" is being held for

contingency use. Currently he foresees no contingency in the immediate future. The correct call sign for CAP air activities will continue to be what we have been using, "CAP" ####.

There is no change. Please let your staff members who are involved in flight operations and your wing counterparts know that "CAP" is still the call sign used.

(Ed note: Bottom line is that we continue to use CAP45XX for our call sign)

FAA Advises Pilots to Protect Rights (FAA): (http://www.avweb.com/eletter/archives/avflash/2304-full.html#207274) Under the recently passed Pilot's Bill of Rights, airmen under investigation by the FAA have the right to request air traffic data such as recordings from control towers and flight service stations, and the FAA said (https://www.federalregister.gov/articles/2012/08/28/2012-21145/air-traffic-data-in-the-possession-of-government-contractors) this week it has posted information and links online to facilitate that process. Since air traffic data are stored for only short periods -- usually about 5 to 45 days -- it's important for airmen to submit their request "expeditiously," the FAA said. The FAA website (http://www.faa.gov/pilots/rights/) provides details and an email address that airmen can use to make the request. http://www.avweb.com/eletter/archives/avflash/2304-full.html#207274
(Ed note: I hope no one needs this)

Articles for the VAWG Stan Eval Newsletter: We are always looking for brief articles of interest to VAWG pilots to include in this newsletter. CAP has many very experienced pilots and aircrew who have useful techniques, experiences, and tips to share. Please send your contribution to steve.hertz@ngc.com. If your article is accepted, you will get a pro rata share of the VAWG Stan Eval Newsletter subscription fees.